Flood Protection Corridor Program Project Evaluation Criteria And Competitive Grant Application Form

I. Introduction

Grant funds under the Flood Protection Corridor Program (FPCP) of the Costa Machado Water Act of 2000 (Proposition 13) are available to local public agencies and nonprofit organizations from the Department of Water Resources. Funds will be used to pursue FPCP goals, which are to provide "for the protection, creation, and enhancement of flood protection corridors through all of the following actions:

- "(1) Acquiring easements and other interests in real property from willing sellers to protect or enhance flood protection corridors and floodplains while preserving or enhancing the agricultural use of the real property.
- "(2) Setting back existing flood control levees and, in conjunction with undertaking those setbacks, strengthening or modifying existing levees.
- "(3) Acquiring interests in real property from willing sellers located in a floodplain that can not reasonably be made safe from future flooding.
- "(4) Acquiring easements and other interests in real property from willing sellers to protect or enhance flood protection corridors while preserving or enhancing the wildlife value of the real property."

-- [Water Code, Chapter 5, Article 2.5, Section 79037(b)]

The following information constitutes the basis for determining whether a proposed project meets the legal criteria for funding under the Flood Protection Corridor Program and for evaluating the proposal to determine its priority in competition with all concurrent proposals. Proposals qualified under Section III of these criteria will be placed on one of two priority lists. If the proposal serves a flood protection need that is a high priority with the Department of Water Resources (other than through this Program) and it also rates a high priority *either* with the Department of Conservation for purposes of preserving agricultural land under the California Farmland Conservancy Program, *or* with the Department of Fish and Game for purposes of wildlife habitat or restoration, it will be placed on the "A List". All other qualified projects will be placed on the "B List". "A List" projects will be funded first, and when all "A List" projects have been funded to the Department's stated limit, "B List" projects will be funded.

II. General Information

Project Name: Shannon Farms Agricultural Conservation Easement Project

Project Location: Approximately 5 miles southwest of Yuba City, CA on Oswald Road

two miles west of Township Road.

County: Sutter

Name and address of sponsoring agency or non-profit organization:

Ducks Unlimited, Inc.3074 Gold Canal Drive
Rancho Cordova, CA 95670-6116

Name of Project Manager (contact): Olen Zirkle, Manager - Agricultural Programs

Phone Number: (916) 851-5346 E-mail Address: ozirkle@ducks.org

Grant Request Amount: \$ 673,200

(See hard copy for signature) Director of Operations
Ronald A. Stromstad Title

Date

Project Objective(s): Briefly describe your project and explain how it will advance FPCP goals. Please also include a detailed map of the immediate project site and another that shows its location within your geographical area. Photographs showing problem areas proposed to be enhanced by the project should also be included.

*To be complete, an application package must include all of the items specified in the proposed Section 497.7 of Title 23, California Code of Regulations, Division 2, that is available on the FPCP web site (www.dfm.water.ca.gov/fpcp) by selecting the Regulations link. See Attachment "A."

III. Minimum Qualifications

Project proposals that do not meet the minimum qualifications will not be accepted.

A. The project proposes to use any granted funds for protection, creation, and enhancement of flood protection corridors [Water Code Section 79037(b)].

This project intends to implement a nonstructural management approach (agricultural conservation easement) to enhance the Sutter Bypass flood protection corridor. The project will acquire an agricultural conservation easement that will preserve and enhance the agricultural use and wildlife values of the real property and reduce future flood damage costs by acquiring development rights on real property adjacent to the Bypass. Since this land cannot reasonably be made safe from future flooding, protecting the agricultural land use of the real property enhances flood corridor protection without fee title purchase and keeps the land in production.

The project property, Shannon Farms, is 000 acres of land farmed in flood-irrigated rice located adjacent to the east barrow of the Sutter Bypass, south of the Gilsizer Slough. This property location provides a unique opportunity to enhance ecosystem benefits for wildlife by protecting the connectivity of the natural shaded riverine habitat in the bypass with adjacent open space preserved in seasonally flooded agriculture.

The project proposes to purchase from willing sellers certain development rights, including subdivision rights using a recorded agricultural conservation easement. The easement restrictions will protect the agricultural productivity, open space and important natural wildlife habitat, especially for wetland dependent species, waterfowl and other migratory birds. The conditions of the agricultural conservation easement will preserve and protect the agricultural productive capacity, soils, and agricultural viability, utility, character and values and preserve open space for working landscapes while recognizing that certain natural and wildlife values are an integral part of the protected property. The purpose of the project is to co-manage the land for flood-irrigated agriculture and to provide enhanced wildlife forage and resting habitat for shorebirds, wintering and migrating waterfowl, and other seasonal wetland dependent species.

Protecting the agricultural values in the Sutter Basin is critical to supporting migratory wintering waterfowl. The Sutter Basin has been developed to the point that there are no historical natural wetlands that occur in what is still the Pacific Flyway. Each year this area continues to support 60 percent of the total Continental migratory population of waterfowl that relies on waste grains to supply 75 percent of their energetic needs. Reducing the availability of wildlife-friendly agricultural that supports these life-history requirements will severely impact waterfowl populations and will also significantly increase the probability of future ESA listings of threatened and endangered species associated with seasonal wetlands making it infinitely more difficult to carry out flood corridor enhancement.

In support of the key aspects of this project, the California Department of Conservation has assigned this action a high priority for completion for the purpose of preserving agricultural land in accordance with the Agricultural Land Stewardship Program Act of 1995. In addition, the project lands have been assigned a high priority for completion by the California Department of Fish and Game (See Exhibit "A" – High Priority Verification), as well as the U.S. Fish and Wildlife Service in the 1999 Draft Recovery Plan for the Giant Garter Snake (Miller, and Hornaday. 1999. Draft

Recovery Plan for the Giant Garter Snake. U.S. Fish and Wildlife Service, California/Nevada Operations Office, Region 1.) (See Exhibit "A" – High Priority Verification).

In combination with agricultural and wildlife benefits, the project strongly supports flood damage reduction measures in an area with a history of impacts from levee failures along the Sutter Bypass and Feather Rivers. The Army Corps of Engineers has determined that this is an area where levees of flood protection are well below the 100-year reoccurrence due to a number of structurally deficient segments that are susceptible to seepage problems. The Corps has acknowledged that the existing levees do not provide the design levels of protection for the 100-year reoccurrence.

Portions of the levee system along the Sacramento, Yuba, and Feather Rivers have been determined to be deficient in structural integrity and amount of freeboard provided. According to the Sacramento River Flood Control System Evaluation Initial Appraisal Report – Marysville/Yuba City Area prepared in January of 1990 by the Army Corps of Engineers, the levee system contains a number of structurally deficient segments that are susceptible to seepage problems and do not provide the design levels of flood protection. Without the remedial repairs recommended in the report cited above, the levels of flood protection are well below the 100-year reoccurrence interval that the system was designed to provide. Since levee failures can be rapid blowouts, reasonable flood warning and evacuation would be difficult. As a result, loss of human life could occur under the existing conditions of the levee system.

In addition to potential flooding from insufficient levee protection, localized flooding occurs along the Sutter Bypass from the 10-year and 100-year storm that combines Gilsizer Slough with the Snake River flow through the State North Drain. The combined flow exceeds the capacity of the O'Banion Pump Station and ponds along the levee to about one foot deeper than the 10-year flow. With the Gilsizer Slough being lower than the pump station, ponding takes place first and continues to spread outward.

In order to meet the local challenges associated with flood damage control, this property and other existing agricultural properties buffering the Sutter Bypass can be protected for wildlife values associated with flood-irrigated agriculture and contribute to enhancing the ability of the flood corridor to be inundated with minimal flood damage on flat low-lying farmlands. In addition, keeping these lands in long-term productive agriculture will also continue to strongly support the economy in Sutter County. (Sutter County Board of Supervisors. Sutter County Master Drainage Plan. March 2002. Sutter County, Yuba City, California)

B. A local public agency, a non-profit organization, or a joint venture of local public agencies, non-profit organizations, or both proposes the project [Water Code Section 79037(a)].

Ducks Unlimited, Inc. (DU) is submitting application for funding to purchase development rights on the proposed project lands. DU is a qualified nation-wide 501(c)(3) non-profit organization supporting wetlands conservation as verified by the attached copies of incorporation. In addition, a letter from an attorney, certifying that the official signing this application has the authority to do so, is included in this application. (See Exhibit "B" – Verification of 502(c)(3)).

C. The project will use the California Conservation Corps or a community conservation corps whenever feasible [Water Code Section 79038(b)].

The proposed project represents the purchase of development rights – no on-site restoration or construction work will be necessary.

D. If it is proposed to acquire property in fee to protect or enhance flood protection corridors and floodplains while preserving or enhancing agricultural use, the proponent has considered and documented all practical alternatives to acquisition of fee interest [Water Code Section 79039(a)].

The proposed project purchases development rights – no property in fee.

E. Holders of property interests proposed to be acquired are willing to sell them *[Water Code Section 79040].*

Please see Exhibit "C" – Letter of Intent from Willing Seller.

- F. If it is proposed to acquire property interests, the proposal describes how a plan will be developed that evaluates and minimizes the impact on adjacent landowners prior to such acquisition and evaluates the impact on the following [Water Code Section 79041]:
 - ► Floodwaters including water surface elevations and flow velocities
 - ► The structural integrity of affected levees
 - ► Diversion facilities
 - ► Customary agricultural husbandry practices
 - ► Timber extraction operations

The proposal must also describe maintenance required for a) the acquired property, b) any facilities that are to be constructed or altered.

This proposal does not include construction or alternation flood control structures. The acquisition of development rights will be for the purpose of keeping existing agricultural lands prone to localized flooding and inundation from levee failure from being urbanized. This action will significantly provide future flood reduction damages within Sutter County.

- G. The project site is located at least partially in one of the following:
 - 1. A Federal Emergency Management Agency (FEMA) Special Flood Hazard Area (SFHA), or

This proposal certifies that the project site is located in an area that is hydrologically equivalent to a FEMA SFHA as documented by Montgomery Watson Harza letter dated February 7, 2003 and provided for in Title 23 Code of Regulations, Division 2, Section 497.5(a)(3)(f) – "An area demonstrated to the satisfaction of Department of Water Resources to be hydrologically equivalent to one of those described in Subparagraphs a, b, or e" (See Exhibit "D" – Ltr. Montgomery Watson Harza).

2. An area that would be inundated if the project were completed and an adjacent FEMA SFHA were inundated, or

This proposal certifies that the project site is located in an area that is hydrologically equivalent to a FEMA SFHA as documented by Montgomery Watson Harza letter dated February 7, 2003 and provided for in Title 23 Code of Regulations, Division 2, Section

497.5(a)(3)(f) – "An area demonstrated to the satisfaction of Department of Water Resources to be hydrologically equivalent to one of those described in Subparagraphs a, b, or e" (See Exhibit "D" – Ltr. Montgomery Watson Harza).

3. A FEMA SFHA, which is determined by using the detailed methods identified in FEMA Publication 37, published in January 1995, titled "Flood Insurance Study Guidelines and Specifications for Study Contractors", or

N/A

4. A floodplain designated by The Reclamation Board under Water Code Section 8402(f) [Title 23, California Code of Regulations, Division 2, Section 497.5(a)], or a

N/A

5. Locally designated Flood Hazard Area, with credible hydrologic data to support designation of at lease one in 100 annual probability of flood risk. This is applicable to locations without levees, or where existing levees can be set back, breached, or removed. In the latter case, levee setbacks, removal, or breaching to allow inundation of the floodplain should be part of the project.

This project is located in an area with credible hydrologic data to support a designation of at least one in 100 annual probability of flood risk. The project qualified under this question based on an analysis completed by Eric Clyde, principal engineer, Montgomery Watson Harza showing that the project property has a flood protection of well below the 100-year reoccurrence (See Exhibit "D" – Ltr. Montgomery Watson Harza).

IV. (340 points) Flood Protection Benefits

A. Existing and potential urban development in the floodplain (50)

1. Describe the existing and potential urban development at the site and the nature of the flood risk.

Potential Urban Development: Currently, the Sutter Basin is experiencing rapid growth generated from the Yuba City /Marysville communities and urban and industrial sprawl spreading from Sacramento and Woodland. Two major transportation arteries (Hwy. 99, connecting Sacramento north and Hwy. 113, connecting Davis, Woodland to Yuba City) run by the project properties. These main transportation corridors promise to bring more growth as zoning restrictions change. This potential change in land use would severely fracture agricultural production in the county. The project lands, as well as the surrounding farmlands, are highly productive rice and row crop properties that enjoy a stable water supply and an efficiency of scale associated with large farming operations including rice processing facilities located on the project properties. Urban sprawl would acutely compromise these large farming operations and escalate the on-going conflicts between urban and agricultural uses.

The Sutter County General Plan found that Sutter County is increasingly becoming a bedroom community for the greater Sacramento area. To date, the Sutter County General

Plan allows for ranchettes outside the Yuba City – Live Oak sphere's of influence. Allowed densities within this designation range between 0.1 to 1/3 dwelling unit per acre (3-10 acre parcel size). This designation is intended to accommodate small-scale agricultural uses and residential development with a more rural character than the Estate Residential designation (1/3 to 2 acre parcel size). This allowed land use is the most imminent threat to the properties with ranchettes immediately to the north and east of the subject properties.

Sutter County recognizes the important of protecting a critical mass of agricultural lands to ensure a strong infrastructure to maintain the strong economic base generated from farming. Sutter County has recently become a Williamson Act county. Presently, the long-term viability of the Williamson Act Program is in question and the county must rely on General Plan zoning to protect its agricultural lands. To date, DU has initiated and executed a Memorandum of Understanding with the County Board of Supervisors for the purpose of becoming a designee to hold Sutter County Agricultural Conservation Easements and to ensure that the terms of the easements on agricultural lands are consistent with County policies.

Flood Risk: The Army Corps of Engineers has determined that this is an area where levees of flood protection are well below the 100-year reoccurrence due to a number of structurally deficient segments that are susceptible to seepage problems. The Corps has acknowledged that the existing levees do not provide the design levels of protection for the 100-year reoccurrence. Problems arise when a storm is centered over the Feather-Yuba and/or American River Basins. Sacramento River water released from Shasta Dam 2 or 3 days previously arrives at the various confluences at the same time as flood flows from the Feather-Yuba and American rivers arrive at the same confluence and pressure the levees.

Portions of the levee system along the Sacramento, Yuba, and Feather Rivers have been determined to be deficient in structural integrity and amount of freeboard provided. According to the <u>Sacramento River Flood Control System Evaluation Initial Appraisal Report — Marysville/Yuba City Area prepared in January of 1990 by the Army Corps of Engineers, the levee system contains a number of structurally deficient segments that are susceptible to seepage problems and do not provide the design levels of flood protection. Without the remedial repairs recommended in the report cited above, the levels of flood protection are well below the 100-year reoccurrence interval that the system was designed to provide. Since levee failures can be rapid blowouts, reasonable flood warning and evacuation would be difficult. As a result, loss of human life could occur under the existing conditions of the levee system.</u>

Shasta operators are also constrained by the operating rule curve to make releases based on conditions in the reservoir and for a limited distance downstream. Although storms are often recognizable more than 2 days in advance, the specific location where the storm will center is not easily predicted.

In addition to the potential from levee failure, localized flooding has historically been associated with the Gilsizer Slough. The Gilsizer Slough is an engineered, trapezoidal channel which starts in Yuba City, and continues south until draining into the State Drain. The State Drain is an engineered, channel that carries the Gilsizer Slough drainage north to the O'Banion Pump Station. The State South Drain is an $11,800 \pm foot long trapezoidal$ channel constructed with the Sutter Bypass East Levee in the 1920s. The drain's main purpose is to carry flow from the Gilsizer Slough northerly to the O'Banion Pump Station. According to previous reports by Von Geldern Engineering Co. in 1998 and the California State Department of Water Resources in 1976, the State South Drain has a capacity of about 340 cfs at normal operating depth.

The O'Banion Pump Station (pump station No. 2 per DWR) has a total design capacity of 786 cfs, of which 524 cfs is primarily for the South Drain. The O'Banion Pump Station was

constructed in the late 1980s, replacing the original pump station that had been in service for about 60 years.

The State South Drain has a capacity that is less than the ten-year flow from Gilsizer Slough. Existing peak flow for 10-year and 100-year are 472 cfs and 1,394 cfs, respectively, versus a drain capacity of 340 cfs. As a result, storm water ponds at the end of the Gilsizer Slough east of the bypass levee and gradually empties after the peak flow. A total time from beginning of the 10-year, 24-hour storm to the end of pumping is about 2 ½ days without additional rainfall.

The 10-year and 100-year Gilsizer storm combines with the Snake River flow through the State North Drain. The combined flow exceeds the capacity of the O'Banion Pump Station. The excess 100-year flow ponds along the levee to about one (1) foot deeper than the 10year flow. Exact depths are difficult to determine because of the flat nature of the area around the pump station and slough. With the Gilsizer Slough being lower than the pump station, ponding takes place first at the end of the Gilsizer and spreads from there. It takes approximately 6 days from the beginning of the 100 year, 24-hour design storm to be fully pumped into the bypass. The 10-year and 100-year Gilsizer storm combines with the Snake River flow through the State North Drain. The combined flow exceeds the capacity of the O'Banion Pump Station. The excess 100-year flow ponds along the levee to about one (1) foot deeper than the 10-year flow. Exact depths are difficult to determine because of the flat nature of the area around the pump station and slough. With the Gilsizer Slough being lower than the pump station, ponding takes place first at the end of the Gilsizer and spreads from there. A longer 100-year 10-day storm, while being less intense, results in larger total volume. A a100-year 10-day storm will take about 24 days to pump all the water into the bypass, and will pond about 1 foot deeper than the 100-year 24-hour storm. This localized flooding due to structural incapacity is expected to continue in the future (Sutter County Board of Supervisors, Sutter County Master Drainage Plan, March 2002, Sutter County, Yuba City, California).

2. How often has flooding occurred historically?

The majority of Sutter County lies on an alluvial plain between the Sacramento and Feather Rivers. The southeastern portion of the County is another alluvial plain located south of the Bear River and east of the Feather River. This area is subject to flows from the Auburn Ravine and other flood waters generated east of Sutter County. Such alluvial plains were geologically formed by water running over the stream banks during naturally reoccurring floods. Although these areas are protected to varying degrees by levee systems, the protection provided is no better than the integrity of the levee system and the degree of maintenance it receives. Sutter County has experienced frequent floods in the past. Severe flooding in 1955, 1958, 1964, 1982-83, 1986,1995 and 1997 primarily resulted in the loss or damage to property and agricultural crops. Historically damaging floods were the result of failures of the levee system rather than the levees being overtopped.

 Discuss the importance of improving the flood protection at this location. Include the number of people and structures that are affected by the flood hazard, and the flood impacts to highways and roads, railroads, airports and other infrastructure, and agriculture.

No flood protection is proposed at this location. This project intends to implement a nonstructural technology through the use of an agricultural conservation easement that will purchase the development rights on flood-prone agricultural lands adjacent to the Sutter Bypass resulting in a significant reduction of future flood damage for Sutter County.

B. Flood damage reduction benefits of the project (100)

1. Does the proposed project provide for transitory storage of floodwaters? What is the total community need for transitory storage related to this water course and what percentage of the total need does this project satisfy? What is the volume of water and how long is it detained?

This project does not provide for transitory storage of floodwaters.

2. Describe any structural and non-structural flood damage reduction elements of the project. (Examples of structural elements are levees, weirs, detention/retention basins, rock slope-protection, etc. Examples of nonstructural elements are acquisition of property for open space, acquisition of land for flood flow easements, transitory storage, relocation of structures and other flood prone development, elevating flood prone structures, flood proofing structures, etc.)

The proposed project will purchase an Agricultural Conservation Easement designed to provide for continued farming of irrigated crops. The project meets the criteria of a nonstructural element of acquiring development rights to maintain open space. Potential flooding of these agricultural lands, already in flood-irrigated rice, will result in minimal flood damage costs.

3. By what methods and by how much dollar value will the project decrease expected average annual flood damages?

By purchasing the development rights on this property and keeping the lands in flooded rice field, any future flood damage costs are expected to be minimal and only associated with minimal releveling of farmlands after inundation of flood waters.

- 4. How does the project affect the hydrologic and hydraulic conditions at the project site and adjacent properties?
 - a) Will the project reduce the magnitude of a flood flow, which could cause property damage and/or loss of life?

This project will not reduce the magnitude of a flood flow.

b) What are the effects of the project on water surface elevations during a flood event which could cause property damage and/or loss of life?

This project would lower surface water elevations during a local flood event by keeping the property in low-intensive agriculture on flat land resulting in little or no flood damage.

c) How are flow velocities impacted by the project during a flood flow which could cause property damage and/or loss of life?

Since this property is flat farmland, no impairments that would impact flow velocities from flooding because the property will allow low-flow inundation.

C. Restoration of natural processes (60)

 Describe how any natural channel processes will be restored (for example: for channel meander, sediment transport, inundation of historic floodplain, etc.) and describe how these natural processes will affect flood management and adjacent properties.

This project does not intend to restore any natural channel processes.

2. Describe any upstream or downstream hydraulic or other effects (such as bank erosion or scour, sediment transport, growth inducement, etc.).

The urban development upslope from this property is rapidly expanding creating storm water run-off and increasing the local in-basin flood risk resulting in inundation of this property. Potential flooding is expected resulting from the inability of the O'Banion and Chandler Pumping Plant to adequately discharge flows into the Sutter Bypass due to a localized flood event or levee failure on the Feather or Yuba Rivers.

If the project includes channel modification or bank protection work, will riprap or dredging be part of the design? If so, provide an analysis of potential benefits and impacts.

No channel modification or bank protection is proposed.

D. Project effects on the local community (60)

1. How will the project impact future flooding on and off this site?

This project proposes to establish an agricultural conservation easement on irrigated croplands along the Sutter Bypass. By acquiring the development rights and protecting this property in productive farmlands in perpetuity, any localized flooding will have no significant structural damage to the land and future structural flood controls will not be necessary.

2. How will the project affect emergency evacuation routes or emergency services and demands for emergency services?

The project represents an agricultural conservation easement of existing flood irrigation rice fields and will not have an impact on emergency evacuation routes or services. In addition, the property is not located near any key emergency evacuation routes or services.

 Explain how the project will comply with the local community floodplain management ordinance and the floodplain management criteria specified in the Federal Emergency Management Agency's National Flood Insurance Program (FEMA's NFIP).

Since this project represents a nonstructural activity, portions of the Flood Plain Management Ordinance 1530 pertaining to structures and construction sites do not apply to this project. However, the outcome and benefit of this project will meet the criteria of the ordinance to

protect surrounding property from flood damage by allowing local flood waters to spread on agricultural lands. In addition, the FEMA NFIP does not apply.

E. Value of improvements protected (70)

1. What is the assessed value of structural improvements that will be protected by the project?

There are no structural improvements associated with the project property. The property is completely farmed in rice. No buildings exist on the land.

2. What is the estimated replacement value of any flood control facilities or structures protected by the project?

There are no flood control facilities or structures on the property.

V. (340 points) Wildlife and Agricultural Land Conservation Benefits

Proponent should provide a statement of the relative importance of the project's wildlife and agricultural land conservation benefits. DWR will use the statement and all other project materials to assign a fraction of the total benefits to each type (wildlife (F_w) or agricultural land conservation (F_a)) so that the fractions total unity. Actual points scored for each type of resource will be multiplied by the respective fraction for each resource, and the wildlife and agricultural scores resulting for each type of resource will be added together.

A. (340xF_w points) Wildlife Benefits

<u>Habitat values</u> refer to the ecological value and significance of the habitat features at this location that presently occur, have occurred historically, or will occur after restoration.

<u>Viability</u> refers to the site's ability, after restoration if necessary, to remain ecologically viable with minimal on-site management over the long-term, and to be able to recover from any natural catastrophic disturbances (fire, floods, etc.).

A1. Importance of the site to regional ecology (70)

1. Describe any habitat linkages, ecotones, corridors, or other buffer zones within or adjacent to the site. How are these affected by the project?

The property described in this proposal is located adjacent to the Sutter Bypass and the Sutter National Wildlife Refuge that is acknowledged for having significant habitat values for waterfowl and wildlife. The farmlands are significantly linked to providing replacement habitat for the federally threatened Giant Garter Snake and for providing breeding and foraging habitat for migrating waterfowl. In recent years, USGS has studied stable populations of Giant Garter Snakes in the Gilsizer Slough area of the Sutter Basin. Because much of the original habitat used by the Giant Garter Snake and waterfowl species has been lost, irrigation canals and ditches (especially canals

with nearby vegetation), together with wildlife-friendly rice farming, and seasonally flooded fields now provide important surrogate habitat. These flooded ricelands represent an ecotone of farmed habitat in a valley wetland complex.

California State Department of Fish and Game and U. S. Fish and Wildlife Service consider this private property to be in a high priority area. This property is located within a critical habitat area for the giant garter snake and provides habitat benefits associated with flood-irrigated rice for seasonal wetland dependent wildlife and waterfowl as described in the U.S. Fish and Wildlife Service Draft Recovery Plan for the Giant Garter Snake (Miller, and Hornaday. 1999. Draft Recovery Plan for the Giant Garter Snake. U.S. Fish and Wildlife Service, California/Nevada Operations Office, Region 1.) (See Exhibit "A" –High Priority Verification).

As a result of land conversion and development within the Central Valley, the distribution and population of these species has declined. By securing an agricultural conservation easement on the property, the agricultural productive capacity will be ensured, as well as providing significant opportunities to sustain existing habitat features through wildlife friendly agricultural practices. These also provide open-space that act as a buffer zone along the Sutter Bypass against encroaching development.

2. Is the site adjacent to any existing conservation areas?

Yes. The property is located adjacent to the Sutter National Wildlife Refuge.

3. Describe any plans for aquatic restoration resulting in in-stream benefits.

N/A

4. Discuss any natural landscapes within the site that support representative examples of important, landscape-scale ecological functions (flooding, fire, sand transport, sediment trapping, etc.)?

The agricultural land use mimics the seasonally flooded wetlands that used to occur in the Central Valley during the winter rainy season. The wildlife-friendly farming practices provide integral habitat connectivity to the Sutter National Wildlife Refuge and the Sutter Bypass by enhancing the availability of breeding, foraging and resting habitat within the Sutter Basin. Existing irrigation ditches and waterways provide important agricultural habitat for the giant garter snake and winter flooded rice fields are a significant source of energetic food supply for migrating waterfowl.

A2. Diversity of species and habitat types (70)

- 1. Does the site possess any:
 - i. areas of unique ecological and/or biological diversity?

This property possess an aquatic ecology created by replacing natural seasonal wetlands with flood-irrigated rice that support the following diversity of species: Western Spadefoot, Western Pond Turtle, Giant Garter Snake, Double-crested Cormorant, Great Egret, Snowy Egret, White-faced Ibis, Aleutian Canada Goose, Bald Eagle, Northern Harrier, Swainson's Hawk, Ferruginous Hawk, Golden Eagle,

Merlin, Peregrin Falcon, Greater Sandhill Crane, Long-billed Curlew, Black Tern, Short-eared Owl, Long-eared Owl, Burrowing Owl, Bank Swallow, Loggerhead Shrike and Tricolored Blackbird.

ii. vegetative complexity either horizontally or vertically?

The property is located near the Gilsizer Slough and associated drains that provides diversity with components of tall emergent vegetation, open water and a riparian corridor along the margins. Agricultural field habitat on the property supports a largely ruderal plant community comprised primarily of weedy non-native plant species. Common ruderal plant species include bind week, Johnson grass, mustards, and velvet leaf. Agricultural ditch on the boarders of the site support an emergent marsh plant community dominated by cattails and barnyard grass. Several isolated willow trees are also present on the ditch banks. Federally threatened giant garter snakes use this habitat, as well as other wetland dependent species.

2. Describe habitat components including year-round availability of water, adequate nesting/denning areas, food sources, etc.

The rice fields associated with this property are typically flooded for about nine months a year during which time they become temporal wetlands with enormous significance to bird populations wintering and breeding in the Central Valley. Mallards, gadwalls, cinnamon teal commonly next here and will use the slough areas and rice fields for brood rearing. Waterfowl from the nearby refuge often feed into the rice fields in great numbers. The flooded rice fields are also vital to migrant and wintering shorebirds. The waste grain left after the rice harvest is a major source of food for a number of waterfowl species. In addition, 27 species of amphibians and reptiles are known to utilize rice culture habitats (California Rice Promotion Board and The California Rice Industry Association. Special Status Wildlife Species Use of Rice Cultivation Lands in California's Central Valley. August 1997. Resource Management International Inc. Sacramento, California).

Describe any superior representative examples of specific species or habitats.

The project property is located in a high priority private land area identified by the U.S. Fish and Wildlife Service requiring protection for the giant garter snake. Waterfowl from the nearby Sutter National Wildlife Refuge often feed into the rice fields in great numbers.

With the gradual loss of wetlands in the Central Valley, wildlife has become increasingly dependent on agricultural lands for food and fiber. Without rice farming, wetland habitats in the Central Valley would be reduced by as much as 45 percent. A loss of this magnitude would have a disastrous effect on waterfowl, and a host of other wetland dependent species.

The property contains a low diversity of wildlife habitat types, although the agricultural fields have substantial wildlife value. Agricultural land occupies about 100% of the total acreage of the property. These habitats include agricultural fields and associated ditches.

4. Does the site contain a high number of species and habitat types? List and describe.

Some 230,000 shorebirds winter annually in the Central Valley and, during fall migration, their numbers can swell to over 400,000. Rice fields provide feeding habitat for nearly 70 percent of these migrant shorebirds during their journey south. In addition, this property significantly contributes to supporting thousands of acres of winter-flooded rice fields in the Sutter Basin where in excess of 200,000 migratory waterfowl winter annually and rely on waste grains to supply up to 75 percent of their energetic needs (California Rice Promotion Board and The California Rice Industry Association. Special Status Wildlife Species Use of Rice Cultivation Lands in California's Central Valley. August 1997. Resource Management International Inc. Sacramento, California).

5. Does the site contain populations of native species that exhibit important subspecies or genetic varieties historically present prior to European immigration?

Please refer to question V.A2.1.i.

A3. Ecological importance of species and habitat types (100)

1. Discuss the significance of habitat types at this location and include any local, regional, or statewide benefits received by preserving or improving the area.

The project is located adjacent to the Sutter National Wildlife Refuge and provides increased habitat values for seasonal wetland dependent species as well as sustainable habitat for the giant garter snake within the basin. Protecting the ability of these lands to remain in seasonally flooded agricultural will significantly contribute to meeting the long-term protection goals of the Central Valley Habitat Joint Venture, the CALFED Ecosystem Restoration Program goals and the U.S. Fish and Wildlife Service Recovery Plan for the Giant Garter Snake.

2. Does the site contain any significant wintering, breeding, or nesting areas? Does it fall within any established migratory corridors? What is the level of significance? How are these affected by the project?

Rice is the primary crop planted on the property. This crop has minimal value as breeding habitat for wildlife, but has substantial value as foraging and rearing habitat for wetland-oriented wildlife. Maintaining availability to irrigated agriculture is vital to the energenic needs of the large populations of annually migrating waterfowl within the Pacific Flyway where this property is located.

The property also provides limited cover at various seasons. The agricultural ditches, uncultivated drains, and interceptors are used as nesting habitat by local waterfowl and other wildlife.

Reducing the availability of wildlife-friendly agricultural that supports these life-history requirements will severely impact waterfowl populations and will also significantly increase the probability of future ESA listings of threatened and endangered species associated with seasonal wetlands.

The property is situated adjacent to the Sutter Bypass and the Sutter National Wildlife Refuge as well as neighboring to the Gilsizer Slough. By protecting the long-term agricultural land use, the project will contribute to increasing the connectivity of established natural environments to sustain threatened and endangered species of waterfowl and wildlife.

Please refer to question V.A2.1.i.

3. Describe any existing habitats that support any sensitive, rare, "keystone" or declining species with known highly restricted distributions in the region or state. Does the site contain any designated critical habitat? How are these affected by the project?

Investigations (such as Elphick and Oring 1998; Day and Colwell 1998) suggest that flooded rice fields are especially important for northern pintal, Ross/ goose, American coot, dunlin, white-fronted goose, American wigeon, mallard, northern shoveler, green-winged teal, long-billed curlew, sandhill crane, and tundra swan. Seven of these species are "species of concern" by the U.S. Fish and Wildlife Service and one is state listed as threatened.

California State Department of Fish and Game and U. S. Fish and Wildlife Service consider this private property to be in a high priority area for the giant garter snake. This property is located within a critical habitat area for the giant garter snake and provides habitat benefits associated with flood-irrigated rice for seasonal wetland dependent wildlife and waterfowl (Miller, and Hornaday. 1999. Draft Recovery Plan for the Giant Garter Snake. U.S. Fish and Wildlife Service, California/Nevada Operations Office, Region 1.) (See Exhibit "B" – High Priority Verification). In addition, the property provides valuable connectivity to the wildlife dependent habitat in the Sutter Bypass.

This project is not affected by these identified areas of concern because the land use activity supports the habitat requirements for these declining species.

4. What is the amount of shaded riverine aquatic (SRA) and riparian habitat to be developed, restored, or preserved?

N/A

A4. Public benefits accrued from expected habitat improvements (60)

 Describe present public use/access, if any. For instance, does or will the public have access for the purpose of wildlife viewing, hunting, fishing, photography, picnics, etc.

Since this project represents a purchase of development rights and not fee title, no public access rights are associated with the transaction. However, the property is adjacent to public roads that are heavily used during the winter months for viewing migratory waterfowl and other wetland species.

2. Discuss areas on the site that are critical for successfully implementing landscape or regional conservation plans. How will the project help to successfully implement the plans?

Implementation of the Sutter County General Plan goal to preserve high quality agricultural land for agricultural purposes will be implemented. (See Exhibit "H" – Sutter County Memorandum of Understanding)

This project will implement the goals of the Central Valley Habitat Joint Venture by supporting the energetic requirements to support levels of waterfowl in the Central Valley and to ensure that flood-irrigated agriculture is available in the Sutter Basin as replacement for lost natural wetlands.

This project supports the Ecosystem Restoration Program goals for implementing the CALFED Record of Decision for protecting wildlife-friendly agriculture.

Central Valley Improvement Act Section 3402(a): to protect, restore and enhance fish, wildlife, and associated habitats in the Central Valley and Trinity River basins of California. This project will support the enhancement of associated habitats along the Sutter Bypass that is critical habitat for migratory populations of anadromous fish. 3406(b)(1): to implement habitat restoration, maintenance, and protection in partnership with willing landowners of agricultural and municipal lands in order to protect, restore, stabilize and improve populations of native species and their habitats impacted by CVP that are not specifically addressed in the Fish and Wildlife Restoration Activities section of the CVPIA with focus on federally listed, proposed or candidate species, other non-listed State and Federal species of special concern in their associated habitats. (U.S. Fish and Wildlife Service and U.S. Bureau of Reclamation. September 17, 1997. Central Valley Project Improvement Act Draft Project Plan (b)(1) "other" Program. Stockton, California)

3. Describe the surrounding vicinity. Include the presence or absence of large urban areas, rapidly developing areas, and adjacent disturbed areas with non-native vegetation and other anthropogenic features. Do any surrounding areas detract from habitat values on the site?

The project lands are located on fertile farmland adjacent to the Sutter Bypass and bordered by similar productive commercial farmlands. Within this corridor of irrigated farmland, parcel sizes range from 100 to 600 acres. However, parcelization has occurred south to Oswald road and west on Franklin and Bogue Roads past the easterly boundary of the property. Further, adjacent properties are being sold in 40-80 acre parcels and converted to rural residential/horse properties. Adjacent properties are still in large blocks of farmlands that are laser-leveled for efficiently water use and productive agriculture.

Surrounding lands include similar flood-irrigated agriculture in rice production. No other significant stands of non-native vegetation are present. Anthropogenic habitat present on the property include agricultural field and agricultural ditch.

4. Describe compatibility with adjacent land uses.

Surrounding lands are in productive agriculture and compatible with the land use of the project. Please refer to Question V.A4.3.

A5. Viability/sustainability of habitat improvements (40)

1. Describe any future operation, maintenance and monitoring activities planned for the site. How would these activities affect habitat values?

The project property will continue to be operated as a farming operation with wildlife benefits. This project will keep the lands in current use and will be annually monitored to ensure that easement restrictions are being fulfilled.

2. Does the site contain large areas of native vegetation or is it adjacent to large protected natural areas or other natural landscapes (for example, a large stand of blue-oak woodland adjacent to public land)?

The property does not contain large areas of native vegetation, however, it is adjacent to the Sutter Bypass and located near the Sutter National Wildlife Refuge where approximately 250,000 wintering waterfowl migrate each year. The Bypass contains a large expanse of shaded riverine habitat and is a critical migratory transportation corridor for anadromous fish.

Is the watershed upstream of the site relatively undisturbed or undeveloped and likely to remain so into the foreseeable future? Describe its condition.

The properties to the east of the project are currently being threatened by urban development. See question V.A4.3.

4. Describe any populations of native species or stands of native habitats that show representative environmental settings, such as soil, elevations, geographic extremes, or climatic conditions (for example, the wettest or most northerly location of a species within the state.)

The project property supports large flocks of wintering waterfowl species, and sustainable populations of giant garter snake. Please refer to question V.A2.4.

B. (340xF_a points) Agricultural Land Conservation Benefits

B1. Potential productivity of the site as farmland (120)

 Describe the quality of the agricultural land based on land capability, farmland mapping and monitoring program definitions, productivity indices, and other soil, climate and vegetative factors.

The Shannon Farms project lands consists of 3% Prime Farmland and 97% Farmland of Statewide Importance (See Exhibit "F" – FMMP Map). Soils on the properties are comprised of class III & IV soils, Oswald-Gridley-Subaco: Moderately deep, level to nearly level, poorly drained and moderately well drained clay and clay loam; in basins and on basin rims. As a result of these heavy tight soils, cropping

patterns are restricted to field crops and cereal grains, predominantly rice which is particularly suited to these types of soils. Permanent crops such as orchards and vineyards are not grown in the area due to high groundwater levels. Average rainfall for the area is 22 to 33 inches with 90% of the precipitation falling between November and March. Snowfall is rare and insignificant. The climate for the area is relatively mild with in excess of two hundred and seventy frost-free days. Warm temperatures predominate between June and August when highs can exceed 100 degrees.

Farmland Mapping & Monitoring Definitions

Prime Farmland: Irrigated land with the best combination of physical and chemical features able to sustain long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for production of irrigated crops at some time during the two update cycles prior to the mapping date.

Farmland of Statewide Importance: Irrigated land similar to Prime Farmland that has a good combination of physical and chemical characteristics for the production of agricultural crops. This land has minor shortcomings, such as greater slopes or less ability to store soil moisture than Prime Farmland. Land must have been used for production of irrigated crops at some time during the two update cycles prior to the mapping date.

2. Are projected agricultural practices compatible with water availability?

The property has an established water right more than sufficient to continue the long-term production of wildlife-friendly rice production.

3. Does the site come with riparian, mineral, and/or development rights?

The property has an appropriative water right that is recorded at the State Water Resources Control Board. Mineral rights have either been retained or sold depending on individual tax parcels. The status of the mineral rights will be reflected in the Preliminary Title Report. The easement requires that any surface disturbance resulting from mineral be minimized and have no impact on the surrounding agricultural or wildlife values. All of the project properties are zoned agricultural-80 acre minimum. This zoning allows one set of agricultural/residential buildings for each 80 acres of land. The easement will purchase and extinguish all these development rights except for one site on the project property.

4. Is the site large enough to sustain future commercial agricultural production?

Yes. The property is located within a region that sustains 15,000 acres of rice production.

5. Does the site contain any adverse or beneficial deed restrictions affecting agricultural land conservation?

No. The property is currently in rice production and zoned as agricultural land in the Sutter County General Plan.

6. Describe the present type of agricultural use including the level of production in relation to the site's productivity potential. What is the condition of the existing infrastructure that supports agriculture uses?

The present type of agriculture is flood-irrigated rice. Sutter County rice production yields some of the highest production rates in California. As a result, this property meets or exceeds the state average for rice production.

The project lands are located within a critical mass of commercially productive Sutter County farmland. Two of the parcels are located within the boundaries of the Garden Highway Water District, the balance of the properties are within the service area of the Sutter Bypass Water Users Association. There is sufficient water to irrigate the prevailing crop of rice. Although there are permanent crops grown on adjacent properties (mainly prunes) and permanent crops have been grown are some parcels in the past, the property is currently planted entirely to rice. The irrigation systems within the properties are comprised of main delivery ditches, individual field turnouts and dedicated drainage systems (See aerial photo). There is no employee housing on the properties and there are no agricultural buildings or facilities. The properties are comprised solely of cropland. Two major rice-processing facilities are located in the adjacent county of Colusa. The Farmers Rice Co-op and Rice Growers Association are at the Sacramento Port and Pacific International Mills is located at Woodland. Essential agricultural supply businesses such as fertilizer and chemical companies, equipment supply businesses, irrigation supplies and others are located in the Yuba City and provide additional infrastructure to the agricultural community.

B2. Farming practices and commercial viability (40)

1. Does the area possess necessary market infrastructure and agricultural support services?

The project property makes a substantial contribution to the Sutter County economy by producing rice and/or rotation row and field crops. Please refer to question B1.6.

2. Are surrounding parcels compatible with commercial agricultural production?

Yes. The property is currently surrounded by other farmlands supporting rice production. However, the area is becoming dispersed with smaller 40 to 80 acre parcels being developed for residential and horse properties. Please refer to question V.B1.6.

3. Is there local government economic support in place for agricultural enterprises including water policies, public education, marketing support, and consumer and recreational incentives?

In compliance with California State law, the Sutter County General Plan must address the location and extent of agricultural land and resources within the land use element. In addition, the conservation element must address the development and utilization of natural resources including soils, and the open space element used for managed production of resources including food and fiber [Government Code Section 65302 (a), (d), (e) and 65560 (b)(2)]. Due to the prominence and importance

of agriculture within Sutter County, the majority of goals, policies and implementation programs relating to this resource have been in a single section of the General Plan. The proposed Agricultural Conservation Easement for this project will address the following goals defined in the General Plan document:

- GOAL 1C. To eliminate the random location of new residential developments. GOAL 1F. To minimize conflicts between agricultural and non-agricultural uses. GOAL 1G. To preserve and protect open space and natural resources and reduce pollution. To preserve and protect the visual and scenic resources of the area. GOAL 1H. GOAL 4A. To preserve and protect the water resources of Sutter County. To protect wetland and riparian areas throughout Sutter County. GOAL 4B. To protect and enhance habitats that support fish and wildlife species. GOAL 4C. GOAL 6A. To preserve high quality agricultural land for agricultural purposes. GOAL 6B. To facilitate preservation, growth and expansion of agricultural industries within Sutter County. GOAL 9A. To facilitate orderly, balanced and diversified growth within the community of Sutter.
 - 4. Describe any present or planned future environmentally friendly farm practices (no till, erosion control, wetlands avoidance, eco-friendly chemicals, recycling wastes, water conservation, biological pest control).

The property is in flood-irrigated rice. The rice growers have entered into a formal agreement with the Central Valley Regional Water Quality Control Board to effectively minimize discharges of herbicide and pesticide residues in the irrigation runoff. Rice production, in general, represents a wildlife-friendly agricultural use of the land. It supports a multitude of seasonally wetland dependent species. Further, after harvest the fields are flooded for rice straw decompositions that result in a vast improvement of air quality in the Sacramento Valley while providing habitat and energetic needs for over-wintering migratory waterfowl. The agricultural conservation easement will require the landowners to continue the winter flooding and to protect the natural habitat inherent within the protected property and the wildlife values that are consistent with the current cropping pattern.

B3. Need and urgency for farmland preservation measures (70)

1. Is the project site under a Williamson Act contract?

No

2. Describe the surrounding vicinity. Include the presence or absence of large urban areas, rapidly developing areas, low density ranchette communities, and adjacent disturbed areas with non-native vegetation and other human-induced features. Do any surrounding areas detract from agricultural values on the site?

The project lands are located on fertile farmland adjacent to the Sutter Bypass together with similar Sutter County agricultural lands. Within this corridor of productive farmland, parcel sizes range from 100 to 600 acres. Many of these lands are laser-leveled for efficient water use and are divided into larger parcels, which

support the large efficient equipment used in rice production. These lands form a greater productive unit that is supported by an efficiently designed water delivery system maintained by the local water districts and by the Project owners.

The Sutter County General Plan designates the southern sphere of influence boundary of Yuba City at Township and Bogue Road. However, parcelization has occurred south to Oswald Road (approx. 1 mile east of Shannon Farms), moving in a southerly direction. Further, the properties are currently divided into 20-acre parcels, which can be sold off as potential mini-farms or consolidated through lot-line adjustments to clustered development. Acquisition of the development rights for the Shannon Farms easement properties will effective reduce the risk of development in this increasingly threatened area and protect its long-term agricultural viability.

Properties along the Sutter Bypass represent a critical mass of rice production located strategically to a long-term water supply. Parcelization of these lands would increase the likelihood of changing the zoning regulations for the remaining farmlands to allow further development and fracture the infrastructure of the county economy by decreasing the output of production. Please refer to question V.A4.3.

3. What types of conversion or development are likely on neighboring parcels? What are the land uses of nearby parcels? Describe the effects, if any, of this project to neighboring farming operations or other neighboring land uses.

Please refer to questions and V.A4.3 V.B3.2.

4. Describe the relationship between the project site and any applicable sphere of influence.

Yuba City's Sphere of Influence (SOI) was amended in 1986 to include all of the Yuba City Urban Area including the Terra Buena Area and the Yuba City Urban Fringe (approx. 19,350 acres). The northern boundary of this area was Pease Road, Township Road to the west, Oswald Road to the south and the Feather River to the east. In 1990, the Yuba City SOI as amended. LAFCO deleted the area between Bogue and Oswald Road. The deleted area contained approximately 5,350 acres of land, which is primarily used for agricultural activity. Today, over 14,000 acres are within the Yuba City SOI. The Yuba City SOI was up for review and expansion in 2002 and will be amended pursuant to the review process. Shannon Farms is located approximately 1½ miles from the SOI.

 Is the agricultural land use on the project site consistent with the local General Plan? Does the General Plan demonstrate commitment to long-term agricultural conservation.

Description of **Sutter County General Plan guidelines and land-use policies** that support a long-term commitment to agricultural land conservation, in general and to the project lands (i.e., LAFCO policies, availability of local agricultural lands trusts, strategies for economic support and enhancement of agricultural business, etc.).

In compliance with California State law, the Sutter County General Plan must address the location and extent of agricultural land and resources within the land use element. In addition, the conservation element must address the development and utilization of natural resources including soils, and the open space element used for

managed production of resources including food and fiber [Government Code Section 65302 (a), (d), (e) and 65560 (b)(2)]. Due to the prominence and importance of agriculture within Sutter County, the majority of goals, policies and implementation programs relating to this resource have been in a single section of the General Plan. The proposed Agricultural Conservation Easement for this project will address the following goals defined in the General Plan document:

GOAL 1C.	To eliminate the random location of new residential developments.
GOAL 1F.	To minimize conflicts between agricultural and non-agricultural uses.
GOAL 1G.	To preserve and protect open space and natural resources and reduce pollution.
GOAL 1H.	To preserve and protect the visual and scenic resources of the area.
GOAL 4A.	To preserve and protect the water resources of Sutter County.
GOAL 4B.	To protect wetland and riparian areas throughout Sutter County.
GOAL 4C.	To protect and enhance habitats that support fish and wildlife species.
GOAL 6A.	To preserve high quality agricultural land for agricultural purposes.
GOAL 6B.	To facilitate preservation, growth and expansion of agricultural industries within Sutter County.
GOAL 9A.	To facilitate orderly, balanced and diversified growth within the community of Sutter.

B4. Compatibility of project with local government planning (50)

1. Is the agricultural land use on the project site consistent with the local General Plan? Does the General Plan demonstrate commitment to long-term agricultural conservation?

Yes. Please refer to question B3.5

2. What is the present zoning and is the parcel developable?

Current zoning is General Agriculture (AG) with an 80-acre minimum requirement. The project property can be developed into 80-acre parcel under current county guidelines.

3. Is there an effective right to farm ordinance in place?

Yes. Sutter County passed the Right to Farm Ordinance 87-1013 in September 1987.

4. Is the project description consistent with the policies of the Local Agency Formation Commission?

Yes. This project does not change the current land use that is consistent with LAFCO policies.

5. Will the project as proposed impact the present tax base?

No. The land is currently in agricultural production and will remain in agricultural production in perpetuity.

B5. Quality of agricultural conservation measures in the project (50)

1. For agriculture lands proposed for conservation, describe any additional site features to be conserved that meet multiple natural resource conservation objectives, including wetland protection, wildlife habitat conservation, and scenic open space preservation where the conservation of each additional site feature does not restrict potential farming activities on the agriculture portions of the site.

There will be an agricultural conservation easement recorded on the deed of this property. The purpose of the easement is described in the following easement language:

"The primary purpose of this Easement is to enable the Protected Property to remain in agricultural use <u>in perpetuity</u> by preserving and protecting its agricultural productive capacity, soils, and agricultural viability, utility, character and values, and by preserving open space for working landscapes. Recognizing that certain natural and wildlife values are an integral part of the Protected Property, and to the extent the preservation and protection of the natural, wildlife habitat (including but not limited to waterfowl and other migratory birds), recreational or scenic values are consistent with the primary purpose stated in this section, it is also the corollary purpose of this Easement to protect these values."

2. What are the present biological/ecological values to wildlife? How are these values affected by the proposed project?

This property is an agricultural property farmed in rice. Although most agricultural development does not provide a substantial level of biological and ecological values to wildlife, the agricultural wetlands created by rice cultivation have provided an important mitigation for the extensive lost of natural wetland habitats. Although rice culture habitats are not as ecologically productive as natural wetlands, they are a viable alternative, and vastly superior to other agricultural options or urban development. Shallow flooding of post-harvest of rice mimics natural flooding patterns, provides micro-habitat for water birds, and does not degrade air quality. A loss of rice production in this area would have a disastrous effect on waterfowl, and a host of other wetland-dependent species that are increasing becoming dependent on agricultural lands for food and covers. Keeping this property in viable rice production will continue to support essential biological and ecological values for species that depend on this geographical area to support their life history requirements.

3. Is the project proponent working with any local agricultural conservancies or trusts?

Ducks Unlimited, Inc. (DU) has been locally involved with the agricultural community in the Sutter and Butte Basins since 1995. Since that time, Olen Zirkle has been working closely with agricultural industry, commodity and water groups such as the California Rice Industry Association and Northern California Water Association whose leadership is familiar with and in support of the agricultural conservation easement program conducted by DU. Mr. Zirkle is also working with California State Department of Conservation's Farmland Conservation Program, the Wildlife Conservation Board, Natural Resource Conservation Service and the Committee for Agriculture and Wildlife Enhancement of the Central Valley Habitat Joint Venture.

4. Does conservation of this site support long-term private stewardship of agricultural land? How does this proposal demonstrate an innovative approach to agricultural land conservation?

Yes. This site is part of a significant farming area in Sutter County that maintains a strong infrastructure for viable rice production in the County. Purchasing the development rights on this property, as well as surrounding properties within this site, will ensure that long-term stewardship of agricultural land will continue for generations. In addition, the agricultural conservation easement that is proposed for this property contains special conditions that are tailored to the needs of rice production and associated wildlife. This approach increases the opportunity for both activities to remain viable and productive. The agricultural conservation easement reflects a strong partnership between agricultural production and wildlife sustainability. DU has worked diligently in developing a tailored approach to stewardship activities that protects the long-term viability of agriculture while maintaining valuable wildlife benefits.

5. Without conservation, is the land proposed for protection likely to be converted to non-agricultural use in the foreseeable future?

Yes. This land is in the path of development due to rapidly expanding urban areas (Yuba City, Woodland and Sacramento). Please refer to Question V.B3.2.

Sutter County has acknowledged by Resolution that preserving agricultural lands is a priority for the County and that "without conservation, the land proposed for protection has the potential to be converted to nonagricultural use in the future." (See Exhibit "E" – Sutter County Board of Supervisors Resolution) This Resolution has been accepted by the California Department of Conservation Farmland Conservancy Program as meeting their requirements for conversion.

VI. (320 points) Miscellaneous Benefits and Quality of Proposal

A. Size of request, other contributions, number of persons benefiting, cost of grant per benefited person (40)

Estimated Total Project Cost		990,355
Amount of FPCP Grant Funds Requested		673,200
Amount of Local Funds Contributed		4,355
Amount of In-kind Contributions		- 0 -
Additional Funding Sources – Department of Conservation		312,800

Number of persons expected to benefit 246,210 Flood Protection Corridor Funds per person benefited.* \$ 2.73**

(* Count as beneficiaries those receiving flood benefits, recreational users of habitat areas protected by the Project, and consumers of food products from agricultural areas conserved by the Project.)

B. Quality of effects on water supply or water quality (90)

^{**} Based on one-year rice production. For long-term benefit (30 years) the number would be significantly reduced.

1. Will water stored by the project provide for any conjunctive use, groundwater recharge, or water supply benefit?

N/A

2. Does the project fence cattle out?

N/A

3. Does the project pass water over newly developed fresh water marsh?

The project represents land that is in existing rice production.

4. Does the project trap sediments?

N/A

C. Quality of impact on underrepresented populations or historic or cultural resources (60)

1. Does the project benefit underrepresented populations? Explain.

No

2. Are historical or cultural resources impacted by the project? Explain.

This project proposes to purchase development rights on existing farmlands that are currently involved in rice production. There are no historical or cultural resources identified with the property.

D. Technical and fiscal capability of the project team (60)

1. Does the project require scientific or technical expertise, and if so, is it provided for in the grant proposal?

This project requires knowledge and legal expertise in real estate transactions and conservation easement documentation. Costs associated with professional expertise is in the proposal budget.

2. Grant funds will be available in phases. What monitoring and reporting mechanisms are built into your administrative plan to track progress, initiation, and completion of successive phases?

A project manager and a financial project coordinator will be assigned to the project. Work progress will be recorded in a financial tracking database. Quarterly reports will be filed describing project status and requesting reimbursement for work completed. A final report will be filed upon execution and recordation of the easement document.

Funds for easement purchase and long-term monitoring will be requested at the close of escrow to complete the easement purchase.

3. Please outline your team's management, fiscal and technical capability to effectively carry out your proposal. Mention any previous or ongoing grant management experience you have.

An experienced project manager and fiscal project coordinator will be assigned to the project. An attorney, experienced in real estate law, will assist the project team. Consultants will be hired to complete all technical due diligence evaluations for the project. DU has extensive experience in grant management with the State of California. The organization has numerous CALFED, U.S. Fish and Wildlife Service Cooperative Agreements, Bureau of Reclamation Cooperative Agreements and several projects being managed by the California State Department of Water Resources. (See Exhibit "G" – Previous Funded Projects)

E. Coordination and cooperation with other projects, partner agencies, and affected organizations and individuals (80)

 List cost sharing and in-kind partners and any other stakeholders involved with your project and indicate the nature of their contribution, if any. Address the team's ability to leverage outside funds.

The project team has been working for several years to address outside funding for the project. Specific to this project, DU and The David and Lucille Packard Foundation have completed much of the pre-project evaluations, including landowner contacts, appraisals and site inspections and evaluations. (See Exhibit "N" – Task List and Budget)

2. Does your project overlap with or complement ongoing activities being carried out by others (such as CALFED, the Sacramento and San Joaquin River Basins Comprehensive Study, the Delta levee program, local floodplain management programs, the Reclamation Board's Designated Floodway program, or a multiple objective regional or watershed plan)? If so, indicate any coordination that has taken place to date or is scheduled to take place in the future.

Implementation of the Sutter County General Plan goal to preserve high quality agricultural land for agricultural purposes will be implemented. (See Exhibit "H" – Sutter County Memorandum of Understanding)

This project will implement the goals of the Central Valley Habitat Joint Venture by supporting the energetic requirements to support levels of waterfowl in the Central Valley and to ensure that flood-irrigated agriculture is available in the Sutter Basin as replacement for lost natural wetlands.

This project supports the Ecosystem Restoration Program goals for implementing the CALFED Record of Decision to preserve wildlife-friendly agriculture.

Central Valley Improvement Act Section 3402(a): to protect, restore and enhance fish, wildlife, and associated habitats in the Central Valley and Trinity River basins of

California. This project will support the enhancement of associated habitats along the Sutter Bypass that is critical habitat for migratory populations of anadromous fish. **3406(b)(1):** to implement habitat restoration, maintenance, and protection in partnership with willing landowners of agricultural and municipal lands in order to protect, restore, stabilize and improve populations of native species and their habitats impacted by CVP that are not specifically addressed in the Fish and Wildlife Restoration Activities section of the CVPIA with focus on federally listed, proposed or candidate species, other non-listed State and Federal species of special concern in their associated habitats. (U.S. Fish and Wildlife Service and U.S. Bureau of Reclamation. September 17, 1997. Central Valley Project Improvement Act Draft Project Plan (b)(1) "other" Program. Stockton, California)

3. Will this application, if approved, begin the next phase of a previously approved project or advance an ongoing project substantially toward completion?

No. This project represents an investment in long-term land protection in the Sutter Bypass area, if approved. It will be initiated and completed as a stand along project.

4. Describe how the proposal demonstrates a coordinated approach among affected landowners, local governments, and nonprofit organizations. If other entities are affected, is there written support for the proposal and a willingness to cooperate?

As a result of the CEAL Program (Conservation Easements for Agricultural Lands) designed by Ducks Unlimited, Inc., (DU), representative, Olen Zirkle, Manager, Agricultural Programs, has approached neighboring farmers concerning the opportunities available to protect their agricultural lands and informed the farmers that neighbor the easement lands currently being negotiated. The CEAL Program will continue to broadcast the program throughout Sutter County, especially along the existing intact farmlands bordering the Sutter Bypass. (See Attachment "I"- CEAL Project Map)

In an effort to ensure local government support, DU has negotiated and executed a Memorandum of Understanding (MOU) between the County of Sutter and Wetland America Trust, Inc., (An affiliate of Ducks Unlimited, Inc.). This formal handshake establishes DU as a designee to hold development rights on Sutter County lands. In particular, the MOU establishes that the CEAL Program will be consistent with county agricultural land protection policies and supportive of the agricultural industry.

The CEAL Program is also coordinating efforts and working with the following non-profits and quasi-governmental organizations to advance the sustainability of productive agricultural lands while maintaining important conservation values:

Central Valley Habitat Joint Venture

Contact: Bob Shaffer

Supports: A regional partnership of conservation agencies and organizations that protects, enhances, and restores wetlands and associated habitats throughout California's Central Valley.

California Waterfowl Association

Contact: Bill Gaines, Director of Government Affairs

Supports: Natural resource development and protection, together with open space values.

Northern California Water Association

Contact: David Guy, Executive Director

Supports: Fisheries protection, water supply and delivery, conservation and stewardship

practices.

Sutter Bypass Water Users Association

Contacts: Dick Aiken John Oii

Supports: Best management practices together with riparian and ecosystem functions

associated with the riparian area of the Sutter Bypass.

The David and Lucille Packard Foundation

Contact: Jean Sedgewick

Supports: The Conserving California Landscapes Initiative, a 5-year program intended to conserve key elements of the California's natural heritage by purchasing development rights to reduce increasing pressures posed by rapidly expanding populations, heightened economic activity and sprawling residential and commercial development.

Thank you for taking the time and effort to fill out this application. Please send one hard copy with required signatures by 3:00 p.m. on February 14th, 2003 to:

Earl Nelson, Program Manager Flood Protection Corridor Program Division of Flood Management 1416 9th Street, Room 1641 Sacramento, CA 95814

Please also send an electronic copy by 3:00 p.m. on February 14th, 2003 to:

Bonnie Ross at bross@water.ca.gov

ATTACHMENT "A"

Section 497.7. Application for Grant Funding

Applicants for grant funding under the program shall file a complete application with the Department on a form prescribed by the Department. The Department shall not revise the application form during any period in which project proposals are being solicited. A complete application shall contain at least the following information:

- (a) A description of the proposed project including:
 - (1) A statement of the problem being addressed:

This project intends to implement a nonstructural management approach (agricultural conservation easement) to enhance the Sutter Bypass flood protection corridor. The project will acquire an agricultural conservation easement that will preserve and enhance the agricultural use and wildlife values of the real property and reduce future flood damage costs by acquiring development rights on real property adjacent to the Bypass. Since this land cannot reasonably be made safe from future flooding, protecting the agricultural land use of the real property enhances flood corridor protection without fee title purchase and keeps the land in production.

(2) A discussion of the ways that the project addresses the problem and satisfies the purposes described in Section 497.5(a)(2):

The project property, **Shannon Farms**, is 746 acres of land farmed in flood-irrigated rice located adjacent to the east barrow of the Sutter Bypass, south of the Gilsizer Slough. This property location provides a unique opportunity to enhance ecosystem benefits for wildlife by protecting the connectivity of the natural shaded riverine habitat in the bypass with adjacent open space preserved in seasonally flooded agriculture.

The project proposes to purchase from willing sellers certain development rights, including subdivision rights using a recorded agricultural conservation easement. The easement restrictions will protect the agricultural productivity, open space and important natural wildlife habitat, especially for wetland dependent species, waterfowl and other migratory birds. The conditions of the agricultural conservation easement will preserve and protect the agricultural productive capacity, soils, and agricultural viability, utility, character and values and preserve open space for working landscapes while recognizing that certain natural and wildlife values are an integral part of the protected property. The purpose of the project is to co-manage the land for flood-irrigated agriculture and to provide enhanced wildlife forage and resting habitat for shorebirds, wintering and migrating waterfowl, and other seasonal wetland dependent species.

Protecting the agricultural values in the Sutter Basin is critical to supporting migratory wintering waterfowl. The Sutter Basin has been developed to the point that there are no historical natural wetlands that occur in what is still the Pacific Flyway. This area continues to support 60 percent of the total Continental migratory population of waterfowl each year that relies on waste grains to supply 75 percent of their energetic needs. Reducing the availability of wildlife-friendly agricultural that supports these life-history requirements will severely impact waterfowl populations and will also significantly increase the probability of future ESA listings of threatened and endangered species associated with seasonal wetlands making it infinitely more difficult to carry out flood corridor enhancement.

In addition, the project lands have been assigned a high priority for completion by the California Department of Fish and Game, as well as the U.S. Fish and Wildlife Service (Miller, and Hornaday. 1999. Draft Recovery Plan for the Giant Garter Snake. U.S. Fish and Wildlife Service, California/Nevada Operations Office, Region 1.) (See Exhibit "A" –High Priority Verification).

In combination with agricultural and wildlife benefits, the project strongly supports flood damage reduction measures in an area with a history of impacts from levee failures along the Sutter Bypass and Feather Rivers. The Army Corps of Engineers has determined that this is an area where levees of flood protection are well below the 100-year reoccurrence due to a number of structurally deficient segments that are susceptible to seepage problems. The Corps has acknowledged that the existing levees do not provide the design levels of protection for the 100-year reoccurrence.

Portions of the levee system along the Sacramento, Yuba, and Feather Rivers have been determined to be deficient in structural integrity and amount of freeboard provided. According to the <u>Sacramento River Flood Control System Evaluation Initial Appraisal Report – Marysville/Yuba City Area</u> prepared in January of 1990 by the Army Corps of Engineers, the levee system contains a number of structurally deficient segments that are susceptible to seepage problems and do not provide the design levels of flood protection. Without the remedial repairs recommended in the report cited above, the levels of flood protection are well below the 100-year reoccurrence interval that the system was designed to provide. Since levee failures can be rapid blowouts, reasonable flood warning and evacuation would be difficult. As a result, loss of human life could occur under the existing conditions of the levee system.

In addition to potential flooding from insufficient levee protection, localized flooding occurs along the Sutter Bypass from the 10-year and 100-year storm that combines Gilsizer Slough with the Snake River flow through the State North Drain. The combined flow exceeds the capacity of the O'Banion Pump Station and ponds along the levee to about one foot deeper than the 10-year flow. With the Gilsizer Slough being lower than the pump station, ponding takes place first and continues to spread outward.

In order to meet the local challenges associated with flood damage control, this property and other existing agricultural properties buffering the Sutter Bypass can be protected for wildlife values associated with flood-irrigated agriculture and contribute to enhancing the ability of the flood corridor to be inundated with minimal flood damage on flat low-lying farmlands. In addition, keeping these lands in long-term productive agriculture will also continue to strongly support the economy in Sutter County. (Sutter County Board of Supervisors. Sutter County Master Drainage Plan. March 2002. Sutter County, Yuba City, California)

(3) A description of the project approach:

Feasibility Phase:

- Contact landowners and determine their willingness to negotiate an agricultural conservation easement on their property based on Duck Unlimited's draft agricultural conservation easement document.
- Conduct a property inspection to determine agricultural and wildlife benefits.
- Approval from Duck Unlimited's National Conservation Programs Committee.
- Execute a willing sellers letter.
- Obtain a certified appraisal and preliminary title report.

Implementation Phase:

- Secure funding.
- Complete the project due diligence, hazardous materials inspection and baseline documentation report
- Negotiate a Purchase and Sale Contract and Final Draft of Agricultural Conservation Easement document.

- Obtain clear title and CLTA Title Insurance.
- Record the easement document and execute long-term monitoring plan.
- (4) A discussion of the expected outcome and benefits of the project:

This project has an expected outcome of providing a nonstructural approach to reducing flood damage in an area that has been evaluated to have at least one in 100 annual probability of flood risk. In addition, this project is expected to benefit Sutter County by reducing flood damage and by keeping agricultural production viable, as well as providing wildlife values that will support threatened and endangered species dependent on flood irrigated agriculture. (Please refer to the discussion in Question III.A in the proposal application.)

(5) A description of the geographic boundaries of the project

The property is located approximately 5 miles southwest of Yuba City on Oswald Road and 2 miles west of Township Road adjacent to the east side of the Sutter Bypass.

(6) Verification that the project is located at least partially in one of the qualifying areas listed in Section 497.5(a).

Section 497.5. Eligible Project and Priorities for Grant Funding

- (a) Grant funding will be available for projects that:
 - (1) Meet or will meet statutory requirements, as follows:
 - (a) The California Conservation Corps or community conservation corps is used when feasible (Water Code Section 79038(b)). N/A
 - (b) No proposed acquisitions of property interest are fee interests unless the Department has considered all practical alternatives (Water Code 79039).

No fee title is proposed in this project.

(c) All proposed acquisitions of property interests are from willing sellers (Water Code Section 79040).

(See Exhibit "D" – Ltr of Intent from Willing Seller)

(d) If the project includes acquisitions of property interest, it also includes a plan to minimize the impact on adjacent landowners (Water Code Section 79041).

This project does not have an impact on adjacent landowners. However, a public meeting will be noticed and held at the regular Sutter County Board of Supervisors upon approval of this proposal.

(e) If the project includes acquisitions of property interest, a public hearing has been held or will be held before acquiring the property interest (Water Code Section 79042).

Upon approval of this proposal, neighboring property owners will be noticed and a public meeting will be held at the regular Sutter County Board of Supervisors meeting (required by the California Department of Conservation Program).

(f) The applicant certifies that it can maintain the project, if necessary using a trust fund established with grant funds (Water Code Section 79044.)

Yes (See Exhibit "J" – Trust Fund Certification)

- (2) Are designed to do one of the following (Water Code Section 79037):
 - (a) Acquire property interests to protect or enhance a flood protection corridor or floodplain while preserving or enhancing agricultural use. N/A
 - (b) Set back existing levees and strengthen or modify related levees. N/A
 - (c) Acquire property interests in a floodplain that cannot reasonably be protected from floods. N/A
 - (d) Acquire property interests to protect or enhance a flood protection corridor while preserving or enhancing wildlife value.

This project will meet the criteria by executing the following agricultural conservation easement language:

Conservation Purposes: The primary purpose of the Easement is to enable the Protected Property to remain in agricultural use in perpetuity by preserving and protecting its agricultural productive capacity, soils, and agricultural viability, utility, character and values, and by preserving open space for working landscapes. Recognizing that certain natural and wildlife values are an integral part of the Protected Property, and to the extent the preservation and protection of the natural, wildlife habitat (including but not limited to waterfowl and other migratory birds), recreational or scenic values are consistent with the primary purpose stated in this section, it is also the corollary purpose of the Easement to protect those values.

- (3) Are located at least partially in:
 - (a) A 100-year floodplain designated by FEMA.

Please refer to subsection (f) below.

(b) An area that would be inundated if the project were completed and an adjacent 100-year FEMA floodplain were inundated,

Please refer to subsection (f) below.

(c) A floodway designated by The Reclamation Board under Water Code Section 8402(f),

N/A

(d) A FEMA-published special flood hazard area, or

N/A

(e) A locally adopted base flood elevation map showing elevation of 100-year recurring flood, based on a hydrologic and hydraulic analysis prepared by a civil engineer registered pursuant to California law or a Professional Hydrologist-Surface Water certified by the American Institute of Hydrology, or Please refer to subsection (f) below.

(f) An area demonstrated to the satisfaction of the Department of Water Resources to be hydrologically equivalent to one of those described in Subparagraphs a, b, or e.

The project qualified under this subsection based on an analysis completed by Eric Clyde, principal engineer, Montgomery Watson Harza showing that the project property has a flood protection of well below the 100-year reoccurrence (See Exhibit "D" – Ltr Montgomery Watson Harza).

- (b) Highest priority under the program will be given to project that meet the requirements of Subsection (a), that the Department has given high priority for purposes of flood protection, and that:
 - (1) The Department of Conservation has given high priority for purposes of preserving agricultural land under the California Farmland Conservancy Program, or

The Department of Conservation has given this project a high priority for support and will be considered for funding as soon as the appraisal is complete. The appraisal is currently in final draft form.

(2) The Department of Fish and Game has given high priority for purposes of wildlife habitat protection.

The project lands have been assigned a high priority for completion by the California Department of Fish and Game, (See Exhibit "A" –High Priority Verification).

(7) A description and justification of any proposed use of program funds for flood control system or water system repairs performed as part of an easement program or a project developed or financed under the program (Water Code Section 79043).

This project does not intend to use program funds for a flood control system or water system repairs.

(8) A demonstration that the project is technically feasible.

The technical capacity of this project is represented by the expertise and background of Olen Zirkle, Manager, Agricultural Programs and Paul Dutro, Esq. (See Exhibit "P" – Statement of Qualifications) who will negotiating and executing the final agricultural conservation easement documentation. Mr. Zirkle has successfully executed and is currently managing other large agricultural conservation easements within the Sutter Basin. The appraisal of the project property was conducted by a certified MIA and a reputable title company will handle the escrow. All documentation has been and will be reviewed by the Grantor's and Grantee's attorneys. The easement land is not expected to have any unusual encumbrances associated with the title.

(9) A hydrologic and hydraulic analysis prepared by a civil engineer registered pursuant to California law or a Professional Hydrologist-Surface Water certified by the American Institute of Hydrology.

(See Exhibit "D" – Ltr. Montgomery Watson Harza)

(10) A complete initial study environmental checklist as required by Section 15063(f), Title 1, California Code of Regulations, and if available a completed Environmental Impact Report or other environmental documentation as required by CEQA.

(See Exhibit "K" – CEQA Environmental Checklist)

(11) A list of required permits for the project and an implementation plan for their procurement.

No permits required.

- (b) Maps and drawings as necessary to describe the project, including:
 - (1) A vicinity map: (See Exhibit "L" Vicinity Map)
 - (2) A map indicating location of project features and boundaries of affected property: (See Exhibit "M" Project Features Map)
 - (3) Drawings or sketches of project features as necessary to describe them.

N/A

- (c) A financial summary including:
 - (1) The estimated cost of the project broken down by task:

(See Exhibit "N" – Task List and Budget)

- (2) The estimated flood control benefits of the project: This project represents a non-structural approach (agricultural conservation easement). Flood benefits to the surrounding areas cannot be calculated because the project has no impact on flood flows or velocities. There will be a savings resulting from keeping the property in low-intensive agricultural and restricting future development on the easement property to one building site. The property owner may or may not build on the site in the future. Please refer to Question VI.A for a quantification of persons benefiting from this project.
- (3) The amount of the grant requested: \$ 673,200
- (4) The estimated amount to be funded by the applicant:

DU contribution \$4,355.

(5) Identification of any other parties contributing to the cost, and the amounts and activities to be funded by them:

Department of Conservation Farmland Conservancy Program \$ 293,040.

- (d) A summary of proposed property acquisition rights including:
 - (1) Identification of each property: Tax Parcel Nos. APN 21-230-01,02,03 and 21-230-35 and 21-150-18.
 - (2) Names, addresses and telephone numbers of the property owners and lessees or tenants: Mike Shannon
 4999 Pierce Road
 Yuba City, CA 95993 (530) 657-1584
 - (3) The type of property rights to be acquired (such as easement or fee title):

An agricultural conservation easement will purchase the development rights, restrict subdivision and maintain agricultural production capacity associated with wildlife benefits.

- (4) Evidence that affected landowners are willing participants in any proposed real property transactions: (See Exhibit "C" Letter of Intent from Willing Seller)
- (5) A justification of any proposed acquisition of fee interest in property to protect or enhance a flood protection corridor or floodplain while preserving or enhancing agricultural use (Water Code Section 79037(b)(1)) which includes:
 - a. Reason for the fee title acquisition. N/A
 - Alternatives considered to fee title acquisition for each property.
 N/A
 - c. Proposed final disposition of the property. N/A
 - d. Effect on county property tax revenue. N/A
- (e) A tentative work plan for the project including:
 - (1) A timetable for execution of the project. Filing date December 31, 2004
 - (2) A task breakdown for the project. (See Exhibit "N" Task List and Budget)
 - (3) A description of how services of the California Conservation Corps, or local community conservation corps will be used in the project. N/A

(f) A list of names and addresses of owners of all property interests in parcels adjacent to those for which acquisition of property rights is proposed.

(See Exhibit "O" – Adjacent Property Owner List)

- (g) If property rights are to be acquired for the project, or if a need is indicated in environmental review documentation prepared for the project pursuant to CEQA, a plan to minimize the impact of the project on adjacent property owners, including but not limited to the following (Water Code Section 79041):
 - (1) An evaluation of the impact on floodwaters.

N/A (See Exhibit "K" – CEQA Environmental Checklist)

- (2) The structural integrity of affected levees. N/A
- (3) Diversion facilities. N/A
- (4) Current and historic agricultural practices on the property site and in the vicinity. N/A
- (5) Timber extraction operations. N/A
- (6) An evaluation with regard to maintenance. N/A
- (h) A description of the input and participation that local groups and affected parties provided in the preparation of the work plan and application. N/A
- (i) A statement relative to the use of a trust fund for maintenance, or any proposed alternative, as specified in Water Code Section 79044.

It is the proponents plan to use the requested trust fund to cover the costs of maintaining long-term monitoring and enforcement of easement provisions associated with the restrictions recorded in the agricultural conservation easement.

- (j) Either or both of the following, depending on applicability:
 - (1) An analysis of the project benefits to wildlife habitat.

Recent studies on winter flooded small grains indicate that a wide diversity of waterbirds use this habitat type. Given the degradation of California's natural wetlands, the winter flooded small grains are critical for a variety of species. Unless the management practices of winter flooding and planting into wildlife-friendly crops are protected by a long-term agreement, such as an agricultural conservation easement, no long-term protection for such habitat is available.

Investigations (such as Elphick and Oring 1998; Day and Colwell 1998) suggest that flooded rice fields are especially important for northern pintal, Ross/ goose, American coot, dunlin, white-fronted goose, American wigeon, mallard, northern shoveler, green-winged teal, long-

billed curlew, sandhill crane, and tundra swan. Seven of these species are "species of concern" by the U.S. Fish and Wildlife Service and one is state listed as threatened.

The area these properties represent is critical for the Sutter Basin and linkages from the Sacramento Valley to the Delta and San Joaquin Valley (Miller and Duncan 1999). The location of these properties in juxtaposition with the managed wetland habitat of the Sutter National Wildlife Refuge, raises the energetic value for waterbirds. A host of other threatened/endangered species benefit from the long-term protection of this habitat type and include giant garter snake, white-faced ibis, and Swainson's hawk.

(2) A description of project actions to preserve agricultural land.

The project will preserve agricultural land by negotiating and purchasing from willing sellers and agricultural conservation easement for the primary purpose of enabling the protected property to remain in agricultural use in perpetuity by preserving and protecting its agricultural productive capacity, soils, and agricultural viability, utility, character and values and by preserving open space for working landscapes. Once the easement is purchased and executed a deed restriction will be recorded on the property deed and an annual monitoring plan will be initiated.

(k) A statement of qualifications for the project team.

See Exhibit "P" - Statement of Qualifications

(I) A written statement by an attorney certifying that the applicant is authorized to enter into a grant agreement with the State of California. (See Exhibit "B" – Verification of 501(c) (3))

Note: Authority: Water Code Sections 8300, 12580, and 79044.9. Reference: Water Code Sections 79035 through 79044; Public Resources

Code Sections 21000 et seq.; California Code of Regulations,

Title 1, Section 15063(f)